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MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

SP-75 SERIES

Jameco Part Number 194853 (SP-75-24)

- .LOW COST, HIGH RELIABILITY
- .105◦C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .REMOTE CONTROL (OPTION)
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- .BUILT IN PFC CIRCUIT

MODEL / SPECIFICATION	SP-75 -3.3	SP-75 -5	SP-75 -7.5	SP-75 -12	SP-75 -13.5	SP-75 -15	SP-75 -24	SP-75 -27	SP-75 -48
DC OUTPUT VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±2%	±2%	±2%	±2%	±2%	±2%	±1%	±1%	±1%
OUTPUT RATED CURRENT	15A	15A	10A	6.3A	5.6A	5A	3.2A	2.8A	1.6A
OUTPUT CURRENT	0-15A	0-15A	0-10A	0-6.3A	0-5.6A	0-5A	0-3.2A	0-2.8A	0-1.6A
RIPPLE & NOISE	80mV	80mV	80mV	80mV	80mV	80mV	100mV	100mV	100mV
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
LOAD REGULATION	±1%	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
RATED OUTPUT POWER	49.5W	75W	75W	75.6W	75.6W	75W	76.8W	75.6W	76.8W
EFFICIENCY	68%	72%	74%	77%	78%	79%	80%	80%	80%
DC VOLTAGE ADJ.	+10,-5%								
INPUT VOLTAGE RANGE	85~264VAC 47~63Hz 120~370VDC								
AC CURRENT	1.3A/115V 0.7A/230V								
INRUSH CURRENT	COLD START 40A/230V								
LEAKAGE CURRENT	<2mA/240VAC								
OVERLOAD PROTECTION	105~150% TYPE:CONSTANT CURRENT LIMITING RESET:AUTO RECOVERY								
OVER VOLTAGE PROTECTION	115%~135% TYPE:SHUTDOWN RESET:RE POWER ON								
TEMP. COEFFICIENT	±0.05% / ◦C (0~50◦C)								
SETUP, RISE, HOLD UP TIME	600ms, 60ms, 20ms								
POWER FACTOR	PF>0.93/230VAC, PF>0.96/115VAC								
REMOTE CONTROL (OPTION)	CN3:3V-15VDC POWER OFF, <3VDC POWER ON								
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES								
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms								
WORKING TEMP., HUMIDITY	-10◦C~+60◦C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH								
STORAGE TEMP., HUMIDITY	-20◦C~+85◦C, 10%~95% RH								
DIMENSION	179* 97* 33mm (L*W*H) CASE:920A								
WEIGHT	550gs								
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED								
EMC STANDARDS	CISPR22 (EN55022) CLASS B, EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-3-2,-3 VERIFICATION								

NOTE :
1. ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25º C AMBIENT.
2. TOLERANCE GINCLUDE SET UP TOLERANCE, LINE REGULATION, LOAD REGULATION.
3. RIPPLE & NOISE ARE MEASURED AT 20MHz BY USING A 12" TWISTED PAIR TERMINATED WITH A 0.1uF & 47uF CAPACITOR.
4. LINE REGULATION IS MEASURED FROM LOW LINE TO HIGH LINE AT RATED LOAD.

2001-10-29

NEXT (MECHANICAL INFO)

MEAN WELL

SWITCHING POWER SUPPLY

ISO-9001 CERTIFIED MANUFACTURER

SP-75P SERIES

- .LOW COST, HIGH RELIABILITY
- .105◦C OUTPUT CAPACITOR
- .INTERNATIONAL AC INPUT RANGE
- .HIGH EFFICIENCY, LOW WORKING TEMPERATURE
- .SOFT-START CIRCUIT, LIMITING AC SURGE CURRENT
- .SHORT CIRCUIT, OVERLOAD, OVER VOLTAGE PROTECTED
- .COMPACT SIZE, LIGHT WEIGHT
- .100% FULL LOAD BURN-IN TEST
- .BUILT IN EMI FILTER, LOW RIPPLE NOISE
- .BUILT IN PFC CIRCUIT
- .REMOTE CONTROL (OPTION)

MODEL / SPECIFICATION	SP-75P -3.3	SP-75P -5	SP-75P -7.5	SP-75P -12	SP-75P -13.5	SP-75P -15	SP-75P -24	SP-75P -27	SP-75P -48
DC OUTPUT VOLTAGE	3.3V	5V	7.5V	12V	13.5V	15V	24V	27V	48V
OUTPUT V. TOLERANCE	±2%	±2%	±2%	±2%	±2%	±2%	±1%	±1%	±1%
OUTPUT RATED CURRENT	15A	15A	10A	6.3A	5.6A	5A	3.2A	2.8A	1.6A
OUTPUT CURRENT	0-15A	0-15A	0-10A	0-6.3A	0-5.6A	0-5A	0-3.2A	0-2.8A	0-1.6A
RIPPLE & NOISE	80mV	80mV	80mV	80mV	80mV	80mV	100mV	100mV	100mV
LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
LOAD REGULATION	±1%	±1%	±1%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
RATED OUTPUT POWER	49.5W	75W	75W	75.6W	75.6W	75W	76.8W	75.6W	76.8W
EFFICIENCY	68%	72%	74%	77%	78%	79%	80%	80%	80%
DC VOLTAGE ADJ.	+10,-5%								
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TEMP. COEFFICIENT	±0.05% / ◦C (0~50◦C)								
SETUP, RISE, HOLD UP TIME	600ms, 60ms, 20ms								
POWER FACTOR	PF>0.93/230VAC, PF>0.96/115VAC								
REMOTE CONTROL (OPTION)	CN3:3V-15VDC POWER OFF, <3VDC POWER ON								
VIBRATION	10~500Hz, 2G 10min./1cycle, PERIOD FOR 60min. EACH AXES								
WITHSTAND VOLTAGE	I/P-O/P:3KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC								
ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:500VDC / 100M Ohms								
WORKING TEMP., HUMIDITY	-10◦C~+60◦C(REFER TO OUTPUT DERATING CURVE), 20%~90% RH								
STORAGE TEMP., HUMIDITY	-20◦C~+85◦C, 10%~95% RH								
DIMENSION	173* 91* 31mm (L*W*H)								
WEIGHT	350gs								
SAFETY STANDARDS	UL1950, TUV EN60950 APPROVED								
EMC STANDARDS	CISPR22 (EN55022) CLASS B, EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61000-3-2,-3 VERIFICATION								

NOTE : 1.ALL PARAMETERS ARE SPECIFIED AT 230VAC INPUT, RATED LOAD, 25◦C AMBIENT.
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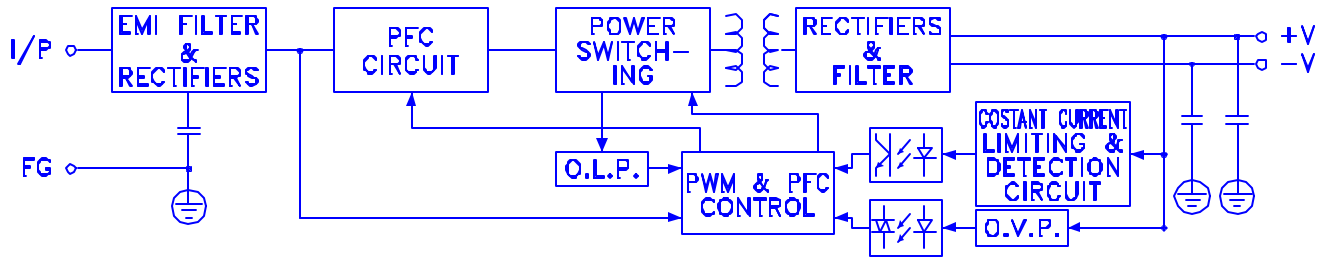
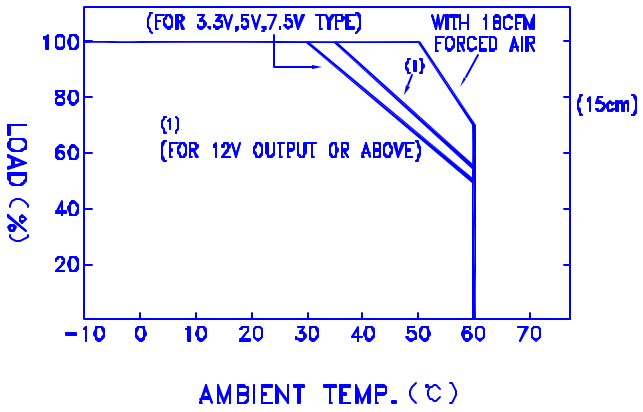
2001-10-29

BLOCK DIAGRAM

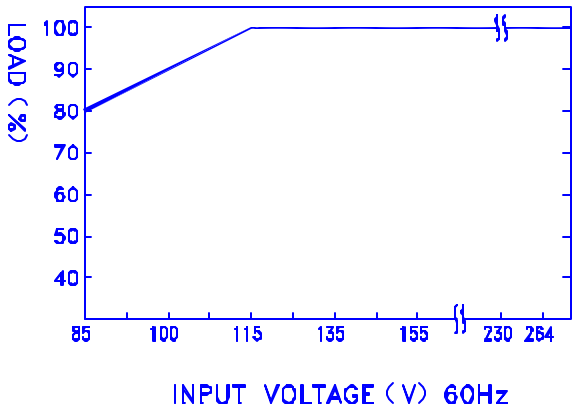


PFC fosc: 67KHz
PWM fosc: 134KHz

OUTPUT DERATING VS Ta

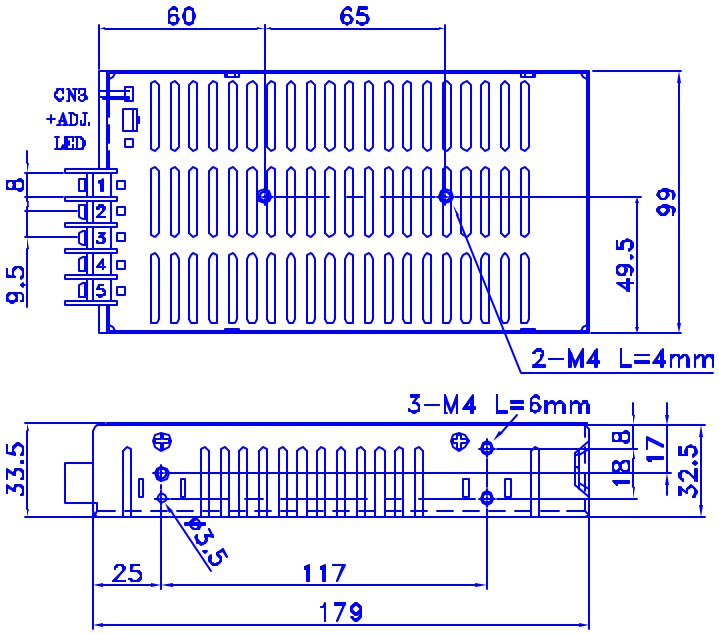


OUTPUT DERATING VS INPUT VOLTAGE



DIMENSION (mm)

- ☒ CASE 920A
- ☒ TERMINAL PIN NO. ASSIGNMENT
  - ☒ CN3: MOLEX 5046-02 COMPATIBLE REMOTE CONTROL (OPTION)
    - ☒ PIN 1 : DC OUTPUT +V
    - ☒ PIN 2 : DC OUTPUT -V
    - ☒ PIN 3 : FG ⏚
    - ☒ PIN 4,5 : AC INPUT
- ☒ MATING CONNECTORS
  - ☒ CN3 MATING CONNECTOR TYPE MOLEX 5051 OR 5102 SERIES OR EQUIVALENT WITH MOLEX 2759 AND 5103 OR QUIVALENT CRIMP TERMINALS.



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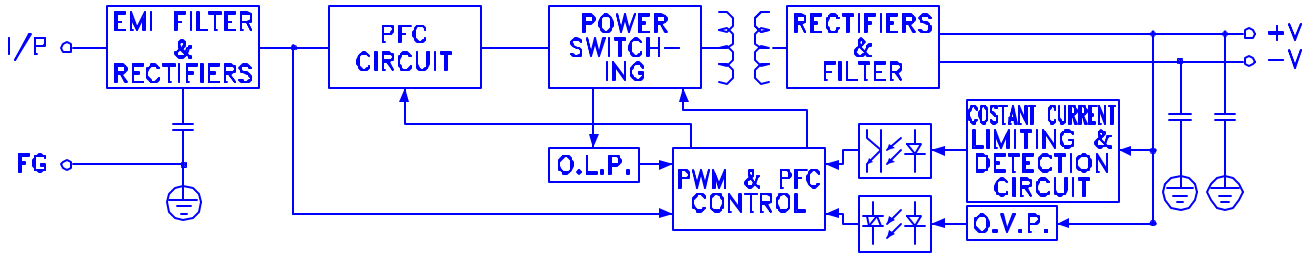
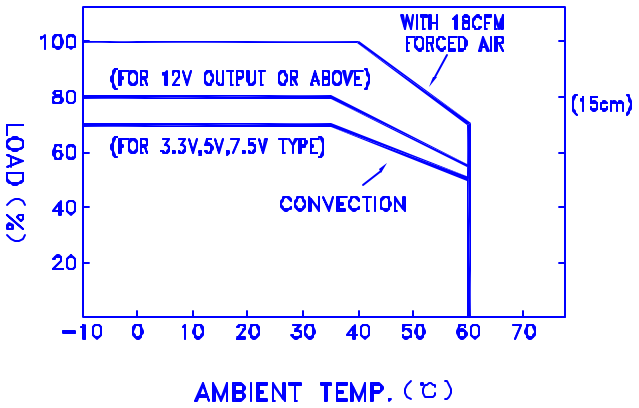
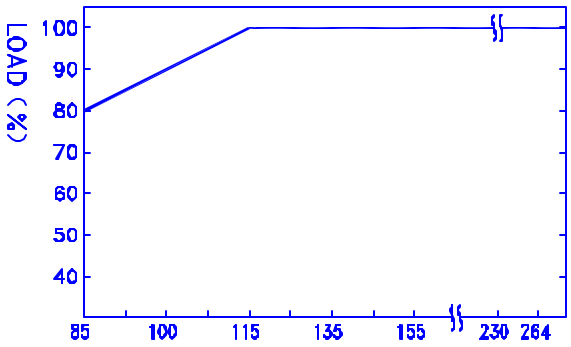


PFC fosc : 67KHz
PWM fosc : 134KHz

OUTPUT DERATING VS Ta



OUTPUT DERATING VS INPUT VOLTAGE



DIMENSION (mm)

- TERMINAL PIN NO. ASSIGNMENT
  - PIN 1 : DC OUTPUT +V
  - PIN 2 : DC OUTPUT -V
  - PIN 3 : FG ⏚
  - PIN 4,5 : AC INPUT
- TERMINAL PIN NO. ASSIGNMENT
  - CN3 : REMOTE CONTROL (OPTION)
    MOLEX 5046-02 COMPATIBLE
- MATING CONNECTORS
  - CN3 MATING CONNECTOR TYPE MOLEX 5051 OR 5102 SERIES OR EQUIVALENT WITH MOLEX 2759 AND 5103 OR QUIVALENT CRIMP TERMINALS.